

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).
2. (canceled).
3. (currently amended): An image processing device comprising:
 - (a) a detecting device for detecting defect portions in an image represented by electronic information;
 - (b) a deciding device for selecting a correction method from among a plurality of types of correction methods for correcting a defect portion, or for deciding a range of application of each of at least two correction methods correcting a defect portion; and
 - (c) a correction device for correcting defect portions in the electronic information by applying the correction method selected by the deciding device, or for correcting defect portions in the electronic information by applying the at least two methods in the application ranges decided by the deciding device~~The image processing device according to claim 1,~~

wherein the deciding device selects the correction method or decides the application ranges using at least one characteristic of the defect portion selected from the group consisting of: a correlation of density changes in each component color in an area adjacent to the defect portion; density distribution in areas surrounding the defect portion of the image; an information

as to whether the defect portion is present within a principal area of the image or not; and extent of overlap of the defect portion with a principal area of the image.

4. (canceled).

5. (canceled).

6. (canceled).

7. (canceled).

8. (original): An image processing device comprising:

(a) a feature amount calculation device for use with electronic information representing an image having a defect portion, the feature amount calculation device being for calculating respective amounts of image features in a plurality of different directions from within defect portions;

(b) an individual correction value calculation device for obtaining interpolation correction values for correcting the defect portion from information through areas of the image in each of the plurality of directions;

(c) a final correction value calculation device for obtaining, based on amounts of image features of each direction calculated by the feature amount calculation device, a final correction value from correction values calculated for each direction by the individual correction value calculation device; and

(d) a correction device for correcting the defect portion in the electronic information representing the image, using a final correction value calculated by the final correction value calculation device.

9. (original): The image processing device according to claim 8, wherein, as the image feature amount, the feature amount calculation device calculates for each of a plurality of directions at least one of: a density change in the image along a predetermined direction; a change in an amount of non-visible light along a predetermined direction transmitted through the image recording material or reflected by the image recording material when non-visible light is irradiated onto an image recording material on which an image represented by the image information is recorded; a number of defect pixels present on the image within a fixed distance along the predetermined direction; and a distance traced along the image to a point in a predetermined direction at which normal pixels begin to appear, which do not correspond to a defect portion.

10. (original): The image processing device according to claim 8, wherein at least one of the feature amount calculation device and the individual correction value calculation device performs for each of the plurality of directions a calculation to determine the image feature amount or the correction value in a range as far as to a point, when tracing along the image in a predetermined direction, at which a fixed number of normal pixels begin to appear, which do not correspond to a defect portion.

11. (original): An image processing device for use in producing electronic information representing an image recorded on image recording material, the image processing device comprising:

(a) a calculation device for calculating a brightness alteration amount for correcting a defect portion in the image based on an amount of transmitted or reflected non-visible light in an area adjacent to the defect portion when light is irradiated onto the image recording material, and a difference in the refractive indexes of visible light and non-visible light in the image recording material; and

(b) a correction device for correcting electronic information representing the image such that the brightness of the defect portion of the image represented by the electronic information changes by an amount calculated by the calculation device.

12. (original): The image processing device according to claim 11, wherein the calculation device acquires the feature amount based on one of the type of image recording material and by calculating a ratio of a value obtained when high frequency components are extracted from a change in the amount of transmitted or reflected non-visible light in an area adjacent to the defect portion when non-visible light is irradiated onto the image recording material and a value obtained when high frequency components are extracted from a change in an amount of transmitted or reflected visible light in an area adjacent to the defect portion when visible light is irradiated onto the image recording material.

13. (canceled).

14. (canceled).

15. (canceled).

16. (canceled).

17. (original): An image processing method for correcting electronic information representing an image having a defect portion, wherein the image is recorded on image recording material, the method comprising the steps of:

(a) irradiating the image recorded on image recording material with non-visible light;

(b) receiving the light after irradiation of the image;

(c) calculating a brightness alteration amount for correcting a defect portion in the electronic information representing the image, based on the amount of non-visible light received from the image in the step of receiving, in an area adjacent to the defect portion, and on the difference in refractive indexes of visible light and non-visible light in the image recording material; and

(d) correcting electronic information representing the image so that the brightness of the defect portion in the electronic information changes by an amount calculated in the step of calculating a brightness alteration.

18. (canceled).

19. (canceled).

20. (original): A recording medium comprising program steps recorded thereon, which when used to program a computer, cause the computer to execute the following steps:

(a) calculating a brightness alteration amount for correcting a defect portion in electronic information representing an image recorded on a recording medium, based on an amount of transmitted or reflected non-visible light in an area adjacent to the defect portion when non-visible light is irradiated onto the image recording material, and on the difference in refractive indexes of visible light and non-visible light in the image recording material; and

(b) correcting the brightness in the electronic information so that the brightness of the defect portion changes by the amount calculated in the step of calculating a brightness alteration amount.

21. (previously presented): An image processing device comprising:

(a) a detecting device for detecting defect portions in an image represented by electronic information;

(b) a deciding device for selecting a correction method from among a plurality of types of correction methods for correcting a defect portion, or for deciding a range of application of each of at least two correction methods correcting a defect portion; and

(c) a correction device for correcting defect portions in the electronic information by applying the correction method selected by the deciding device, or for correcting defect portions in the electronic information by applying the at least two methods in the application ranges decided by the deciding device
~~The image processing device according to claim 1,~~

wherein the plurality of types of correction methods comprises a vignetting method in which image information is corrected by reducing high frequency components of a spatial frequency of a defect portion and an area adjacent to the defect portion.

22. (previously presented): The image processing device according to claim 8, wherein the final correction value calculation device obtains a final correction value by calculating weighting coefficients for each direction based on a density gradient and a distance between normal pixels calculated and stored for each direction.

23. (previously presented): The image processing device according to claim 8, wherein the plurality of different directions from within defect portions radiates outwards from the defect portions.

24. (previously presented): The image processing device according to claim 8, wherein the plurality of different directions from within defect portions comprises a plurality of scanning directions and wherein one of the plurality of scanning directions is a straight line in a direction going away from the defect portions and a plurality of the scanning directions are performed in directions 180 degrees opposite each other.